



**City of College Park**  
**Pedestrian Overpass Feasibility Study**  
**Additional Concept Alternatives**

**ADDENDUM TO THE**  
**Technical Summary**

December 2015

TDG Project Number: 5505

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## 1.0 Introduction:

### 1.2 Scope of Work

The City of College Park, Maryland has requested that Toole Design Group, LLC (TDG) perform a limited feasibility investigation of 3 additional alternatives for a planned pedestrian bridge crossing a rail corridor between the City of College Park and the City of Greenbelt. The rail corridor is currently used by Washington Metropolitan Area Transit Authority (WMATA) and CSX Transportation (CSX). TDG prepared and submitted a feasibility report with overpass alternatives to the City of College Park on November 17, 2015. Due to changes in the development on the east side of the rail corridor and decisions by the two cities, three additional concepts and further analysis is requested.

This original project investigated multiple alignments for a pedestrian bridge connection between the Greenbelt Station development (east of the rail corridor) and the Daniels Park neighborhood of College Park (west of the rail corridor) to create a direct and conflict-free connection across the rail line. The City of College Park wanted to pursue Alignment 2, located in the middle of the Greenbelt Station development, as the preferred alternative due to its connectivity and access within the Greenbelt Station development and its connection to City-owned land on the west side. At the direction of The City of Greenbelt, the Greenbelt developer redesigned the site plan on the east side of the pedestrian bridge. TDG was asked to conceptualize variations of Alignment 2 into the new development site plan. The new Alignments are referred to as Alignment 2A, 2B, 2C and 2D.

Based on coordination with the City of College Park, it is understood that the general bridge alignment would connect the green space in the central part of the Greenbelt Station development to the Daniels Park neighborhood either through the College Park Public Works parcel or the Stone Industrial parcel adjacent to the south. The focus of this effort addresses the crossing of the rail tracks, but does not address the location of a trail connection to the existing street network in College Park for all alternatives. Along the west side of the tracks, the Stone Industrial parcel may be redeveloped, however a developer has not yet been identified, and the type of development is yet to be determined. Due to the location of the green space and the closeness of neighboring proposed townhomes, all four alternatives will require the removal of proposed townhome lots and modification to the site plan layout. The affected townhomes are currently shown on site plans, but are not approved for construction. With the modifications to the site plan, it is recommended the developer include some privacy screening between the bridge ramps and the sides of adjacent townhomes.

Conceptual alignments were developed based on aerial photography base mapping, the development's site plans, and PG Atlas property and topographic

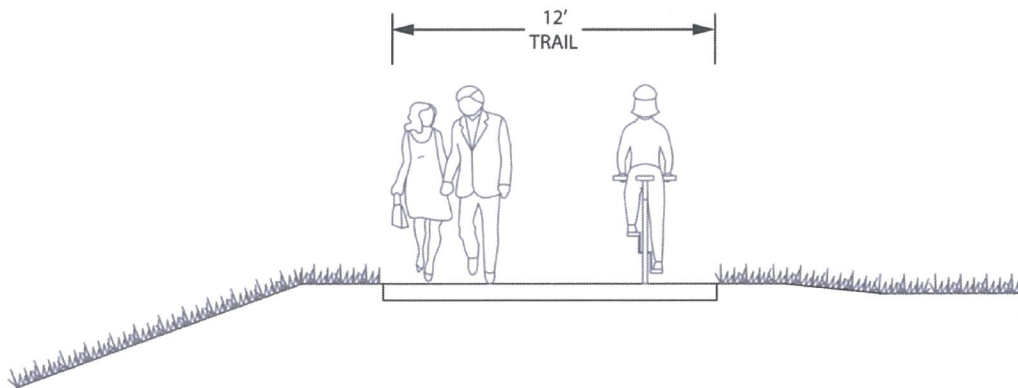
information. The analysis also included a limited assessment of above ground utility impacts based on visible features observed during a field review. Nearby development plans and flood plain maps were also used for the development of the conceptual design.

## 2.0 Concept Design & Alternatives Analysis:

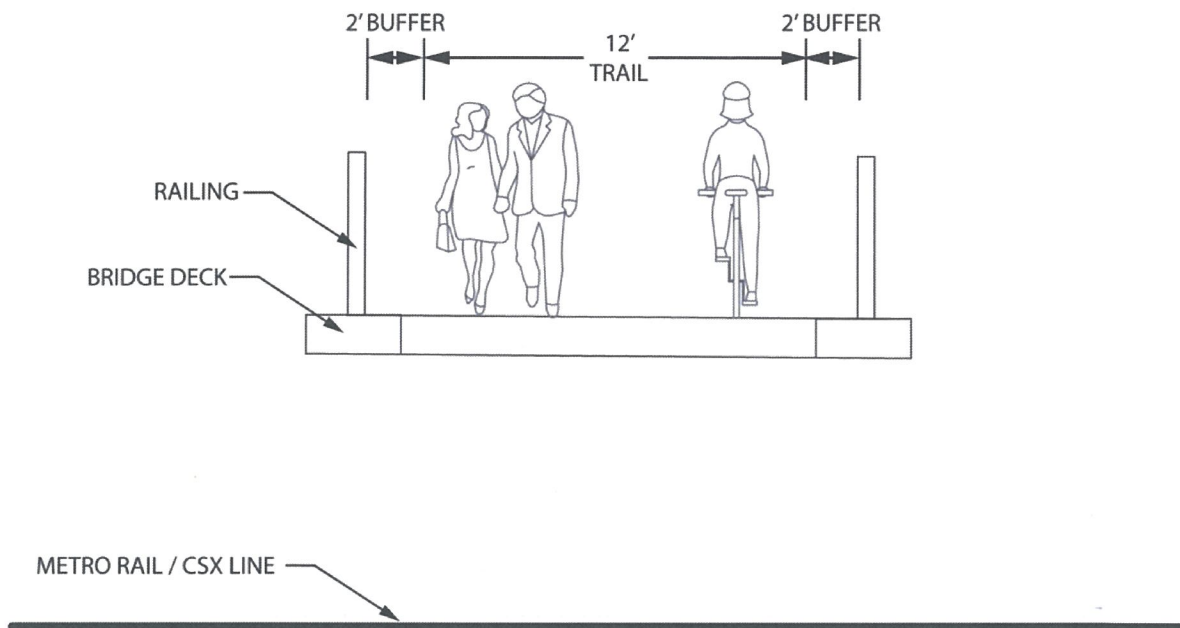
### 2.1 Typical Sections

The typical section remains the same from the Feasibility Study. The College Park-Greenbelt Pedestrian Overpass concept was developed based upon an assumed 12-foot wide, two-way cross-section, as shown in Figure 2 on the next page. This trail width represents the minimum acceptable width for an unconstrained trail anticipated to have greater than 300 trips in the peak hour.

Consistent with the AASHTO Guide for the Development of Bicycle Facilities, a minimum of 2-feet of separation is suggested between the trail and any vertical obstruction including bridge railings. The bridge proposed in the Greenbelt Station development is only 8' wide and not compliant with AASHTO guidelines. The two typical cross-sections developed for the Pedestrian Bridge and Trail are provided below as Figures 1 and 2.



*Figure 1: Typical Shared-use Trail Cross Section*



*Figure 2: Typical Pedestrian Bridge Cross Section Over Metro Green Line/MARC Camden Line/CSX tracks*

## 2.2 Alternatives Analysis

See Appendix A for the Conceptual Alignment Plans.

### **Alignment 2A:**

Alignment 2A will start in the green space within the Greenbelt Station development. The ramp will be directly south of the green space and include a switchback. The highest part of the bridge and ramp will be centered in the green space and visible from the commercial property across Road A. Right-of-Way will need to be approximately 175' x 50' along the property line and will require the removal of four 16' wide proposed townhomes from the Greenbelt Station site plan design. This option includes a shared use path through the center of the green space, but could be adjusted to one side as long as the appropriate trail width is provided. In College Park, the bridge would connect to the Stone Industrial parcel under a future residential development scenario. If this alignment was chosen, a future developer would have to incorporate the bridge into the development plans.

### **Alignment 2B:**

Alignment 2B is essentially a mirror image of Alignment 2A starting in the green space in the Greenbelt Station development but ramps up toward the bridge on the northern side. The ramp will include a switchback and Right-of-Way will



need to be the same size as Alignment 2A (approximately 175' x 50' along the property line). On the north side of the green space, the proposed townhomes are larger and this option will require the removal of four 20' wide townhomes from the Greenbelt Station site plan design. . In College Park, the bridge would connect to the Stone Industrial parcel under a future residential development scenario. If this alignment was chosen, a future developer would have to incorporate the bridge into the development plans.

**Alignment 2C:**

Alignment 2C is the only alternative that does not include a switchback on the Greenbelt side of the tracks. This option starts on the southern side of the green space in the Greenbelt Station development and runs north adjacent to the rail tracks. The bridge crosses the tracks at the end of the second alley north of the green space. Within the Greenbelt Station development, this option would require the removal of two proposed 20' townhomes and one proposed 16' townhome and privacy screening for the three lots adjacent to the pedestrian bridge Right-of-Way. The needed Right-of-Way will be approximately 25' wide and 325' long along the property line and the rail tracks. In College Park, the bridge would connect to the City's Public Works parcel and would require some minor reconfiguration of the property. . The ramp is shown along the south side of the Public Works parcel, next to the Stone Industrial parcel. The bridge would also require a path connection to 51<sup>st</sup> street.

**Alignment 2D:**

Alignment 2D starts on the north edge of the green space in the Greenbelt Station development and includes a switchback on the south-side of the green space. The bridge crosses the tracks near the 1<sup>st</sup> alley north of the greenspace. This option will require the removal of two proposed 16' townhome lots and one proposed 20' townhome lot. The needed Right-of-Way will vary in width from 25' to 50' wide. The total length of Right-of-Way will be approximately 210' long. . In College Park, the bridge would connect to the City's Public Works parcel and would require some minor reconfiguration of the property. The ramp is shown along the south side of the Public Works parcel, next to the Stone Industrial parcel. The bridge would also require a path connection to 51<sup>st</sup> street.

## **3.0 Conclusions:**

### **3.1 Preferred Alternatives**

All alignments are recommended to have a 12' trail and 16' bridge width per AASHTO guidelines. Any alignment proposed on non-City-owned property, will likely require an easement. As shown in Appendix A, a 25' easement is



recommended where an alignment is linear and a 50' easement is recommended where a bridge ramp includes a switchback.

If the Stone Industrial parcel is purchased by a residential developer, Alignment 2A & 2B are preferred locations for the pedestrian bridge. On the Greenbelt side, these two alignments are mirror images and differ only in the type of proposed townhome lots needed to be removed. The functionality and connectivity of the two options are the same. In both 2A & 2B, the full height of the bridge occurs in the center of the greenspace which allows visibility of the bridge from Road A, The adjacent townhomes will be next to shorter pieces of the structures and less vertical privacy screening will be needed. On the College Park side, the future developer can incorporate the bridge into the design to create a convenient trail connection through their property.

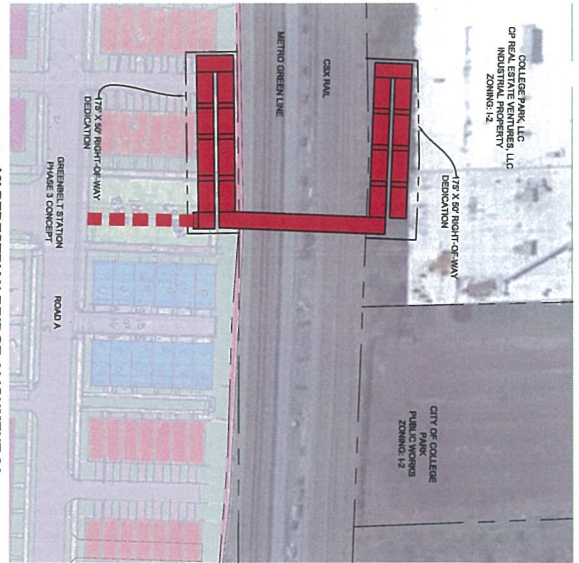
If, it is determined that the Stone Industrial parcel will not become a residential development and remain industrial, a connection to this site doesn't make as much sense and Alignment 2A & 2B become impractical. In this case, Alignment 2C or 2D is preferred. Both Alignment 2C & 2D have good connectivity and access, and connect to land owned by the City of College Park on the west side. However, these alignments have their maximum height occurring at the end of a residential alley and immediately adjacent to a proposed townhome. Also, both alignments do not provide as direct of a route for trail users on the west side. Users must travel along the Public Works Property to 51<sup>st</sup> Street in College Park.

## Appendices

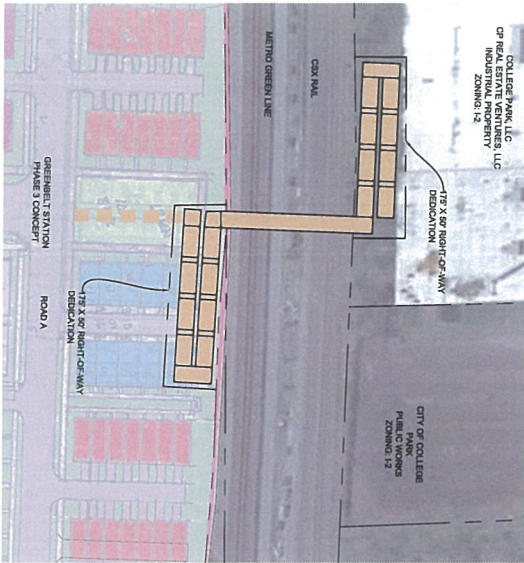
### Appendix A: Conceptual Alignment Plan

## **Appendix A:**

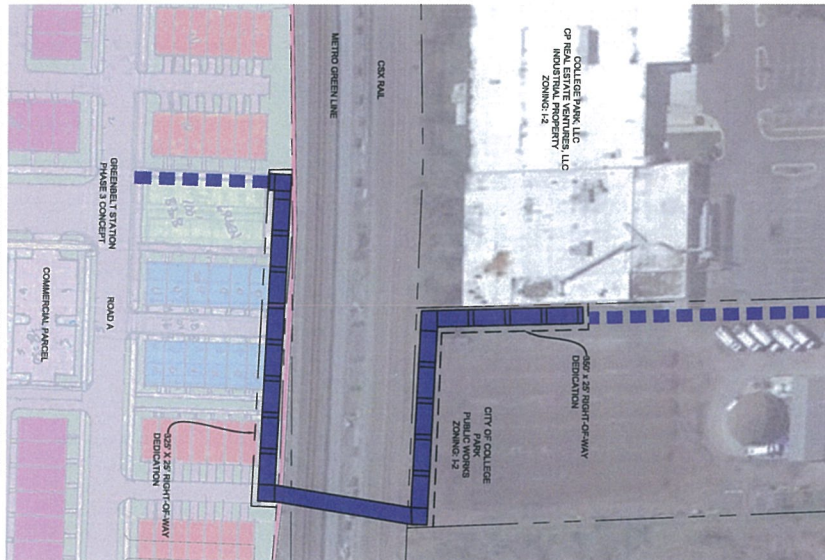
### **Conceptual Alignment Plan**



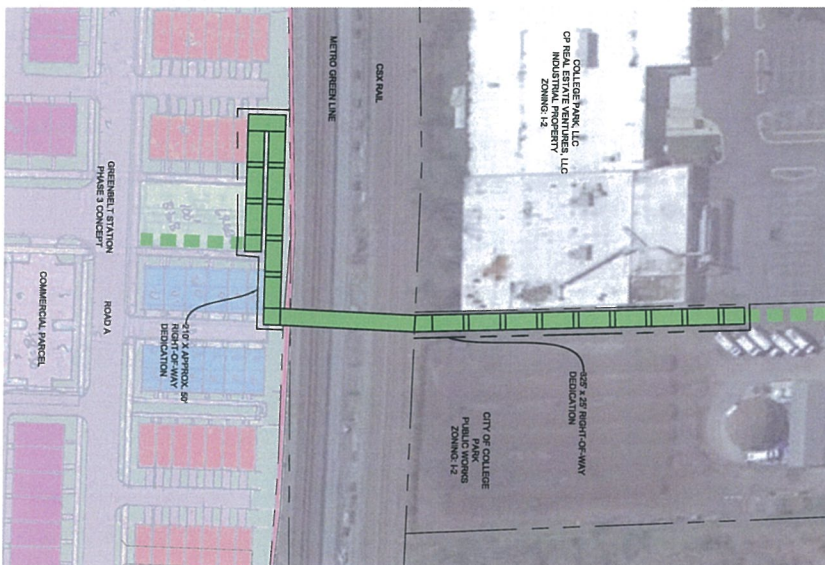
16' PEDESTRIAN BRIDGE ALIGNMENT 2A  
12' PEDESTRIAN TRAIL ALIGNMENT 2A



16' PEDESTRIAN BRIDGE ALIGNMENT 2B  
12' PEDESTRIAN TRAIL ALIGNMENT 2B

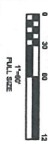


16' PEDESTRIAN BRIDGE ALIGNMENT 2C  
12' PEDESTRIAN TRAIL ALIGNMENT 2C



16' PEDESTRIAN BRIDGE ALIGNMENT 2D  
12' PEDESTRIAN TRAIL ALIGNMENT 2D

**CONCEPT**  
BASE INFORMATION FROM:  
GIS, PG ATLAS, FILED VISIT  
& DEVELOPER'S SKETCH PLAN  
NOT FOR CONSTRUCTION



# CITY OF COLLEGE PARK PEDESTRIAN OVERPASS FEASIBILITY STUDY

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